#3

SEQUENCE LISTING

<110> HYBRIGENICS

Pierre, LEGRAIN

<120> Identification of the Anti-s28 Factor in Helicobacter pylori, in Campylobacter jejuni and in Pseudomonas aeruginosa and Application Thereof

<130> B4797A

<140> US 10/066,127

<141> 2002-01-31

<150> US 60/265,465

<151> 2001-01-31

<160> 29

<170> PatentIn version 3.1

<210> 1

<211> 90

<212> DNA

<213> Helicobacter pylori

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<221> SID1122

<222> (1)..(90)

<223> the Selected Interacting Domain (SID®) of HP1122

<400> 1
atcaagaaag cgattgaaaa taaccagtat aaaatcaact tgcatgagac ttctcacaaa 60

atggcaaagg atttattggg gataagctag 90

<210> 2

<211> 29

<212> PRT

<213> Helicobacter pylori

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<221> SID1122

<222> (1)..(29)

<223>

<400> 2

Ile Lys Lys Ala Ile Glu Asn Asn Gln Tyr Lys Ile Asn Leu His Glu
1 5 10 15

Thr Ser His Lys Met Ala Lys Asp Leu Leu Gly Ile Ser
20 25

<210> 3

<211> 177

<212> DNA

<213> Helicobacter pylori

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<221> SID1032

<222> (1)..(177)

<223> the Selected Interacting Domain (SID®) HP1032

<400> 3
aaagcgctga atcaaatgag cgaaagagag caaatcctta tccagcttta ttactttgaa 60

gagttgaatt tgagcgagat taaagagatt ttaggcatta ctgaatcgcg catttctcaa 120

atcattaaag aagtgattaa aaaggtgcgt aaatccttag gagtggatca tggctga 177

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<211> 58

<212> PRT

<213> Helicobacter pylori

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<221> SID1032

<222> (1)..(58)

<223>

<400> 4

Lys Ala Leu Asn Gln Met Ser Glu Arg Glu Gln Ile Leu Ile Gln Leu
1 5 10 15

Tyr Tyr Phe Glu Glu Leu Asn Leu Ser Glu Ile Lys Glu Ile Leu Gly
20 25 30

Ile Thr Glu Ser Arg Ile Ser Gln Ile Ile Lys Glu Val Ile Lys Lys
35 40 45

Val Arg Lys Ser Leu Gly Val Asp His Gly
50 55

<210> 5

<211> 231

<212> DNA

<213> Helicobacter pylori

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<221> HP1122

<222> (1)..(231)

<223> the ORF of sigma28 factor

<400> 5
atgaatatca aattaaagga ttttacaatg attaatgccg tttcttctct tgctccggtg 60

cagtctttgg ggaattataa gcgtgtggaa aagaatgaaa aagttgaaaa caatgaggcc 120

gctcttgata gggtagctga gatcaagaaa gcgattgaaa ataaccagta taaaatcaac 180

ttgcatgaga cttctcacaa aatggcaaag gatttattgg ggataagcta g 231

<210> 6

<211> 76

<212> PRT

<213> Helicobacter pylori

<220>

<221> HP1122

<222> (1)..(76)

<223>

<400> 6

Met Asn Ile Lys Leu Lys Asp Phe Thr Met Ile Asn Ala Val Ser Ser
1 5 10 15

Leu Ala Pro Val Gln Ser Leu Gly Asn Tyr Lys Arg Val Glu Lys Asn
20 25 30

Glu Lys Val Glu Asn Asn Glu Ala Ala Leu Asp Arg Val Ala Glu Ile
35 40 45

Lys Lys Ala Ile Glu Asn Asn Gln Tyr Lys Ile Asn Leu His Glu Thr
50 55 60

Ser His Lys Met Ala Lys Asp Leu Leu Gly Ile Ser
65 70 75

<210> 7

<211> 768

<212> DNA

<213> Helicobacter pylori

<220>

<221> HP1032

<222> (1)..(768)

<223> The ORF of anti sigma 28 factor

<400> 7

atgattttga tgatggaaaa tagaatgccc aaaggaattc aaaaaactga aacaagcgaa 60

aaaaatatag aaaaggtttt gaacgcctat gataagcaac aacaccacca tcaagacgat 120

ctcgctattc agtatttacc agccgtgcgc gccatggcgt ttcgtctaaa agagcgcttg 180

cccagctcta ttgattttaa cgatctggtt tctattggca ctgaagaatt gattaaatta 240

gccaggcgtt atgagagcgc gttaaacgat tctttttggg ggtatgcgaa gactcgtgtc 300

aatggggcga tgttagatta tttgcgctct ttagatgtga tttctcgctc tagcaggaaa 360

ctcattaaaa gcattgatat tgaaatcacc aaacacctta atgagcatgg gaaagagcct 420

agcgatgcgt atttagcgca aactttaggc gaaaatattg aaaaaattaa agaagccaaa 480

acggcttcag atatttatgc gttagtgcca atagatgaac aattcaatgc gattgagcaa 540

gatgaaatca ctaaaaaaat tgaagcagaa gagttgttag agcatgtcca aaaagcgctg 600

aatcaaatga gcgaaagaga gcaaatcctt atccagcttt attactttga agagttgaat 660

ttgagcgaga ttaaagagat tttaggcatt actgaatcgc gcatttctca aatcattaaa 720

gaagtgatta aaaaggtgcg taaatcctta ggagtggatc atggctga 768

<210> 8

<211> 255

<212> PRT

<213> Helicobacter pylori

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<221> HP1032

<222> (1)..(255)

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<400> 8

Met Ile Leu Met Met Glu Asn Arg Met Pro Lys Gly Ile Gln Lys Thr
1 5 10 15

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Glu Thr Ser Glu Lys Asn Ile Glu Lys Val Leu Asn Ala Tyr Asp Lys
            20                  25                  30

Gln Gln His His His Gln Asp Asp Leu Ala Ile Gln Tyr Leu Pro Ala
        35                  40                  45

Val Arg Ala Met Ala Phe Arg Leu Lys Glu Arg Leu Pro Ser Ser Ile
    50                  55                  60

Asp Phe Asn Asp Leu Val Ser Ile Gly Thr Glu Glu Leu Ile Lys Leu
65                  70                  75                  80

Ala Arg Arg Tyr Glu Ser Ala Leu Asn Asp Ser Phe Trp Gly Tyr Ala
                85                  90                  95

Lys Thr Arg Val Asn Gly Ala Met Leu Asp Tyr Leu Arg Ser Leu Asp
            100                 105                 110

Val Ile Ser Arg Ser Ser Arg Lys Leu Ile Lys Ser Ile Asp Ile Glu
        115                 120                 125

Ile Thr Lys His Leu Asn Glu His Gly Lys Glu Pro Ser Asp Ala Tyr
    130                 135                 140

Leu Ala Gln Thr Leu Gly Glu Asn Ile Glu Lys Ile Lys Glu Ala Lys
145                 150                 155                 160

Thr Ala Ser Asp Ile Tyr Ala Leu Val Pro Ile Asp Glu Gln Phe Asn
                165                 170                 175

Ala Ile Glu Gln Asp Glu Ile Thr Lys Lys Ile Glu Ala Glu Glu Leu
            180                 185                 190

Leu Glu His Val Gln Lys Ala Leu Asn Gln Met Ser Glu Arg Glu Gln
        195                 200                 205

Ile Leu Ile Gln Leu Tyr Tyr Phe Glu Glu Leu Asn Leu Ser Glu Ile
    210                 215                 220

Lys Glu Ile Leu Gly Ile Thr Glu Ser Arg Ile Ser Gln Ile Ile Lys
225                 230                 235                 240

Glu Val Ile Lys Lys Val Arg Lys Ser Leu Gly Val Asp His Gly
                245                 250                 255
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<210> 9

<211> 65

<212> PRT

<213> Campylobacter jejuni

<220>

<221> Cj1464

<222> (1)..(65)

<223> Cj1464 protein

<400> 9

Met Ile Asn Pro Ile Gln Gln Ser Tyr Val Ala Asn Thr Ala Leu Asn
1 5 10 15

Thr Asn Arg Ile Asp Lys Glu Thr Lys Thr Asn Asp Thr Gln Lys Thr
20 25 30

Glu Asn Asp Lys Ala Ser Lys Ile Ala Glu Gln Ile Lys Asn Gly Thr
35 40 45

Tyr Lys Ile Asp Thr Lys Ala Thr Ala Ala Ala Ile Ala Asp Ser Leu
50 55 60

Ile
65

<210> 10

<211> 107

<212> PRT

<213> Pseudomonas aeruginosa

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<221> PA3351

<222> (1)..(107)

<223> PA3351 protein

<400> 10

Met Val Ile Asp Phe Asn Arg Leu Asn Pro Gly Ser Thr Pro Ala Thr
1 5 10 15

Thr Gly Arg Thr Gly Ser Thr Ala Ala Gly Arg Pro Asp Ala Thr Gly
20 25 30

Ala Asp Lys Ala Gly Gln Ala Ala Thr Ser Ala Pro Lys Ser Gly Glu
35 40 45

Ser Val Gln Ile Ser Glu Thr Ala Gln Asn Met Gln Lys Val Thr Asp
50 55 60

Gln Leu Gln Thr Leu Pro Val Val Asp Asn Asp Lys Val Ala Arg Ile
65 70 75 80

Lys Gln Ala Ile Ala Asp Gly Thr Tyr Gln Val Asp Ser Glu Arg Val
85 90 95

Ala Ser Lys Leu Leu Asp Phe Glu Ser Gln Arg
100 105

<210> 11

<211> 32

<212> DNA

<213> Artificial sequence

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<223> primer PCR 1550

<400> 11
catgagatct ctataaaaac agagcggcta aa 32

<210> 12

<211> 42

<212> DNA

<213> Artificial sequence

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<223> primer PCR 1551

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<210> 13

<211> 42

<212> DNA

<213> artificial sequence

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<223> linker

<400> 13
tgacgcatgc actagtcata tgatgttcct tgtttttga tg 42

<210> 14

<211> 22

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 2386

<400> 14
gctcggtacc cgggtgacta ac 22

<210> 15

<211> 27

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 2387

<400> 15
cttcccccgg gcattattcc ctccagg 27

<210> 16

<211> 28

<212> DNA

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<220>

<223> primer PCR 2388

<400> 16
ccatcgatct cacacgctta gacgctaa 28

<210> 17

<211> 29

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 2389

<400> 17
ggactagtct aagttaaaag ccttaagat 29

<210> 18

<211> 26

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 2391

<400> 18
cgcggatcct tttaagaaag gtgttt 26

<210> 19

<211> 27

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 2392

<400> 19
ttttctgcag gccaacgccc ttttggt 27

<210> 20

<211> 32

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 1777

<400> 20
gggaattcca tatgaatatc aaattaaagg at 32

<210> 21

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> primer PCR 1669

<400> 21
atcgcggatc cctagcttat ccccaataaa tcctt 35

<210> 22

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> primer PCR 1783

<400> 22
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<210> 23

<211> 32

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 1784

<400> 23
ggactagatc tgcttatccc caataaatcc tt 32

<210> 24

<211> 37

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 1585

<400> 24
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<210> 25

<211> 35

<212> DNA

<213> artificial sequence

<220>

<223> primer PCR 1586

<400> 25
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<210> 26

<211> 20

<212> DNA

<213> artificial sequence

<220>

<223> oligonucleotide 2564

<400> 26
aatgtcgttt cggcttctga 20

<210> 27

<211> 18

<212> DNA

<213> artificial sequence

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<223> oligonucleotide 2565

<400> 27
taaaagcctt aagatatt 18

<210> 28

<211> 18

<212> DNA

<213> artificial sequence

<220>

<223> oligonucleotide H276f

<400> 28
ctatgacggg tatccggc 18

<210> 29

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> oligonucleotide H676r

<400> 29
attccaccta cctctccca 19